Government of Pakistan

National Vocational and Technical Training Commission

Blended International IT Trainings – BIITT 2025

Course Contents/ Lesson Plan

Course Title: Meta Front-End Developer Professional Certificate

Professional Certificate

Duration: 3 Months

NAVTTC HQs, Plot no. 38, Kirthar Road, H-9
Islamabad

Trainer Name	
Course Title	**Meta Front-End Developer Professional Certificate**
Objective of Course	This certificate, designed by the software engineering experts at Meta, the creators of Facebook and Instagram, will prepare you for a career as a front-end developer. In this program, you'll learn: • How to code and build interactive web pages using HTML5, CSS and JavaScript. • In-demand design skills to create professional page layouts using industry-standard tools such as Bootstrap, React, and Figma. • GitHub repositories for version control, content management system (CMS) and how to edit images using Figma. • How to prepare for technical interviews for front-end developer roles. By the end, you'll put your new skills to work by completing a real-world project where you'll create your own front-end web application. Any third-party trademarks and other intellectual property (including logos and icons) referenced in the learning experience remain the property of their respective owners. Unless specifically identified as such, Coursera's use of third-party intellectual property does not indicate any relationship, sponsorship, or endorsement between Coursera and the owners of these trademarks or other intellectual property.
Course Execution Plan	Total Duration of Course: **3 Months (12 Weeks)**
	Class Hours: **3 Hours per day**
	Theory: 30% Practical: 70%
	Weekly Hours: **15 Hours Per week**
	Total Contact Hours: **200 Hours**

Learning Outcome of the Course	From the program, you will learn: • Create a responsive website using HTML to structure content, CSS to handle visual style, and JavaScript to develop interactive experiences. • Learn to use React in relation to Javascript libraries and frameworks. • Learn Bootstrap CSS Framework to create webpages and work with GitHub repositories and version control. • Prepare for a coding interview, learn best approaches to problem-solving, and build portfolio-ready projects you can share during job interviews.
Companies Offering Jobs in the respective trade	• Accenture • Cognizant • Infosys • Capgemini • Amazon • Turing • Andela • Deel • 10Pearls • Arbisoft • NetSol Technologies • Systems Limited (Pakistan) • TkXel (Pakistan) • Freelancing. These companies value hands-on, project-based learning, strong understanding of modern frontend technologies, and proven skills in HTML, CSS, JavaScript, React, responsive design, and UI/UX best practices.
Job Opportunities	Over the past decade, front-end development has become a cornerstone of the digital experience, shaping how users interact with websites and applications. As businesses increasingly focus on responsive, user-friendly, and visually appealing interfaces, skilled front-end developers are in high demand across industries. This certification equips learners with the practical skills to design, build, and optimize modern web applications using HTML, CSS, JavaScript, React, and UI/UX principles. Graduates are prepared to contribute to dynamic development teams or launch independent careers in the global digital economy. Graduates of this certification can pursue roles such as: • Front-End Developer • Web Developer • React.js Developer • JavaScript Developer • UI/UX Developer • Junior Software Engineer (Frontend)

	• Website Designer & Developer • Responsive Web Designer • Freelance Web Developer • Front-End Support Engineer
No of Students	25-30

Learning Place	Labs				
Instructional Resources	The following link will be accessible for students once they are enrolled in the program: https://www.coursera.org/professional-certificates/meta-front-end-developer				
Scheme of Study	**Sr. No**	**Main Topics**	**Theory Hrs.**	**Practical Hrs.**	**Total Hrs.**
	1.	Introduction to Front-End Development / Programming with JavaScript	**5**	**10**	**15**
	2.	Programming with JavaScript	**5**	**10**	**15**
	3.	Programming with JavaScript	**5**	**10**	**15**
	4.	Programming with JavaScript / Version Control	**7**	**8**	**15**
	5.	Version Control / HTML and CSS in depth	**5**	**10**	**15**
	6.	HTML and CSS in depth / React Basics	**5**	**10**	**15**
	7.	React Basics	**4**	**11**	**15**
	8.	React Basics / Advanced React	**4**	**11**	**15**
	9.	Advanced React / Principles of UX/UI Design	**4**	**11**	**15**
	10.	Principles of UX/UI Design / Front-End Developer Capstone	**3**	**12**	**15**
	11.	Front-End Developer Capstone	**2**	**13**	**15**
	12.	Front-End Developer Capstone / Coding Interview Preparation	**5**	**10**	**15**
	Total		**54**	**126**	**180**

Scheduled Week	Module Title	Day	Learning Units	Home Assignment
Week 1/12	Introduction to Front-End Development / Programming with JavaScript	Day 1	Get started with web development	Improve your Bio page with Bootstrap
		Day 2	Introduction to HTML and CSS	
		Day 3	UI Frameworks	
		Day 4	End-of-Course Graded Assessment	
		Day 5	Introduction to Javascript	
Week 2/12	Programming with JavaScript	Day 1	Introduction to Javascript - Continued	JavaScript arrays, objects and functions
		Day 2	The Building Blocks of a Program	
		Day 3	The Building Blocks of a Program – Continued	
		Day 4	Programming Paradigms	
		Day 5	Programming Paradigms – Continued	
Week 3/12	Programming with JavaScript	Day 1	Programming Paradigms – Continued	JavaScript Essentials: Spread, Rest, and Concise Array Operations
		Day 2	Programming Paradigms – Continued	
		Day 3	Programming Paradigms – Continued	
		Day 4	Programming Paradigms – Continued	
		Day 5	Programming Paradigms - Continued	
Week 4/12	Programming with JavaScript / Version Control	Day 1	Testing	Little Lemon Receipt Maker
		Day 2	End-of-Course Graded Assessment	
		Day 3	Software collaboration	
		Day 4	Command Line	
		Day 5	Working with Git	
Week 5/12	Version Control / HTML and CSS in depth	Day 1	Graded Assessment	Managing a project in GitHub
		Day 2	HTML in depth	
		Day 3	HTML in depth – Continued	
		Day 4	HTML in depth – Continued	

		Day 5	Interactive CSS	
Week 6/12	HTML and CSS in depth / React Basics	Day 1	Interactive CSS - Continued	Transforming and transitioning elements
		Day 2	Interactive CSS – Continued	
		Day 3	Graded Assessment	
		Day 4	React Components	
		Day 5	React Components - Continued	
Week 7/12	React Basics	Day 1	React Components - Continued	Dynamic Component Rendering in React: A Login/Logout App
		Day 2	Data and State	
		Day 3	Data and State – Continued	
		Day 4	Navigation, Updating and Assets in React.js	
		Day 5	Navigation, Updating and Assets in React.js – Continued	
Week 8/12	React Basics / Advanced React	Day 1	Your first React app	Build a calculator app
		Day 2	Components	
		Day 3	Components - Continued	
		Day 4	React Hooks and Custom Hooks	
		Day 5	React Hooks and Custom Hooks - Continued	
Week 9/12	Advanced React / Principles of UX/UI Design	Day 1	JSX and testing	Create your portfolio
		Day 2	JSX and testing - Continued	
		Day 3	Final project	
		Day 4	Introduction to UX and UI design	
		Day 5	Evaluating interactive design	
Week 10/12	Principles of UX/UI Design / Front-End Developer Capstone	Day 1	Applied Design Fundamentals	Booking a table on the Little Lemon website
		Day 2	Applied Design Fundamentals – Continued	
		Day 3	Designing your UI	
		Day 4	Course summary and final assessment	

		Day 5	Starting the project	
Week 11/12	Front-End Developer Capstone	Day 1	Starting the project – Continued	Capstone Project
		Day 2	Project foundations	
		Day 3	Project foundations – Continued	
		Day 4	Project functionality	
		Day 5	Project functionality – Continued	
Week 12/12	Front-End Developer Capstone / Coding Interview Preparation	Day 1	Project functionality – Continued	Capstone Project
		Day 2	Project Assessment	
		Day 3	Introduction to the coding interview	
		Day 4	Introduction to Data Structures	
		Day 5	Introduction to Algorithms	

List of Machinery / Equipment

1. Software List

Sr. No	Software Name
1.	MS Office(Installed on each PC)
2.	Operating System (Windows, Linux or other Operating Systems)
3.	Programming Languages including PyCharm, Notebook

2. Minimum Qualification of Teachers / Instructor

The qualification of teachers / instructor of this course should be a minimum of bachelor's in computer science / software engineering with minimum 3 years of development experience in relevant trade.

3. List of Machinery/Equipments

Sr. No	Name of item as per curriculum	Quantity physically available at the training location
1	Computers Minimum Core-i5 8th Generation ● LCD Display 17" with built in speakers	25
2	DSL Internet Connection (Minimum 5 MB)	Available on every PC
3	**Accessories/Devices** ● Connectors ● Multimedia ● Audio/visual aid ● White Board ● Flip Chart Board	25 each
4	**Wires, data cables, power plugs, power supply**	For every PC
5	**UPS**	Available
6	**Generator / Solar Backup**	Available
7	**Air Conditioner (2 Tons)**	Available